



National Transportation Safety Board Aviation Accident Data Summary

Location:	BISMARCK, ND	Accident Number:	DEN82DA079
Date & Time:	05/06/1982, 2107 CDT	Registration:	N4504Q
Aircraft:	CESSNA 402A	Injuries:	8 None
Flight Conducted Under:	Part 135: Air Taxi & Commuter - Non-scheduled		

Analysis

THE PILOT DISCOVERED THAT THE GEAR WOULD NOT EXTEND ELECTRICALLY. MANUAL EXTENSION WAS ATTEMPTED, BUT THE CRANK WOULD NOT TURN IN EITHER DIRECTION. WHILE APPLYING PRESSURE TO THE CRANKS, THE CHAIN DRIVE FAILED. THE PLANE WAS LANDED WITH THE GEAR RETRACTED. DISASSEMBLY OF THE EMERGENCY EXTENSION SYSTEM REVEALED THAT A SHAFT, PN 0843400-50, WAS BENT AND GOUGE MARKS WERE FOUND ON A TOOTH OF A BEVEL GEAR, PN 0843400-49. ALSO, THE MANUAL EXTENSION CHAIN, PN 500000-52, BETWEEN THE HAND CRANK AND BEVEL GEARS, HAD BROKEN. NO OTHER DISCREPANCIES WERE EVIDENT IN THE LANDING GEAR SYSTEM.

Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

Findings

Occurrence #1: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

1. (C) LANDING GEAR, EMERGENCY EXTENSION ASSEMBLY - JAMMED
2. WHEELS UP LANDING - PERFORMED - PILOT IN COMMAND

Pilot Information

Certificate:	Flight Instructor; Commercial	Age:	64
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Instrument Rating(s):	Airplane
Other Aircraft Rating(s):		Instructor Rating(s):	Airplane Multi-engine; Airplane Single-engine; Instrument Airplane
Flight Time:	30000 hours (Total, all aircraft), 179 hours (Total, this make and model), 30000 hours (Pilot In Command, all aircraft), 102 hours (Last 90 days, all aircraft), 5 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	CESSNA	Registration:	N4504Q
Model/Series:	402A 402A	Engines:	2 Reciprocating
Operator:	CAPITAL AVIATION CORPORATION	Engine Manufacturer:	CONTINENTAL
Operating Certificate(s) Held:	On-demand Air Taxi (135)	Engine Model/Series:	TSIO-520-E
Flight Conducted Under:	Part 135: Air Taxi & Commuter - Non-scheduled		

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Dusk
Observation Facility, Elevation:	BIS, 0 ft msl	Weather Information Source:	Unknown
Lowest Ceiling:	Unknown / 0 ft agl	Wind Speed/Gusts, Direction:	10 knots / , 320°
Temperature:	40° C	Visibility	12 Miles
Precipitation and Obscuration:			
Departure Point:	FARGO, ND (FAR)	Destination:	MONTEREY, CA

Airport Information

Airport:	BISMARCK MUNICIPAL (BIS)	Runway Surface Type:	Asphalt
Runway Used:	35	Runway Surface Condition:	Dry
Runway Length/Width:	4009 ft / 100 ft		

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	7 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Latitude, Longitude:			

Administrative Information

Investigator In Charge (IIC):	Adopted Date:	05/06/1983
Investigation Docket:	NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at pubinq@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .	

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